

REMARKS/ARGUMENTS

Claims 1, 3, 6 to 8, 25, 26, 28 to 31, 34 and 36 to 42 remain in this application. Claims 2, 4, 5, 9 to 24, 27, 32, 33 and 35 have been canceled, without prejudice to submitting in a continuing application. Claims 36 to 42 have been added.

Claims 1, 25, 29 and 33 have been amended as suggested by the Examiner to correct clerical errors.

Independent claims 1, 25, 28 and 33 have been amended to narrow the scope of the claims to require the waterborne coating composition to consist essentially of polyurethane resin particles, epoxy resin particles, polyvinyl chloride resin particles, and a component selected from the group consisting of at least one curing agent, at least one aminoplast, at least one flattening agent, at least one plurality of polymeric particles, at least one plurality of colored particles, at least one plurality of hard particles, at least one surfactant, at least one rheology modifier, at least one defoamer, at least one coalescing aid and combinations thereof. Support for these amendments is found in Examples 1 and 2 on pages 11 and 12 of the Specification; page 2, lines 11 to 25; page 3, lines 18 to 22; page 4, lines 5 to 8; page 5, lines 19 and 20; page 6, line 20; and page 7, lines 1 to 18, for example.

Since the specified polyvinyl chloride resins are not relied upon in distinguishing the cited prior art references, new claim 36 has been added and is of similar scope to claims 1, 25, 28 and 33, except it requires a polyvinyl chloride resin and not the specified polyvinyl chloride resins.

Support for new claim 36 is found in original claim 5. Support for new claim 37 is found in original claim 4, previously presented claims 24 and 32 and at page 5, line 29,

for example. Support for new claim 38 is found at page 6, lines 6 to 8, for example.

Support for new claims 39 to 42 is found in previously presented claims 1, 25, 28 and 33, respectively. The dependency of claim 6 has been changed.

The amendment to the specification corrects an obvious clerical error noted by the Examiner. Those of ordinary skill in the art know that there is no UCAR Waterborne Vinyl AW-845. UCAR Waterborne Vinyl AW-875 was disclosed as the vinyl resin used in original Example 2 on page 11 of the specification.

Support for the description of the pendant moieties set forth on amended specification page 4 is found in the UCAR Waterborne Vinyl AW-875 product bulletin, filed in the parent application. Specifically see Figure 1 on page 3 of the product bulletin for the support. Since the bulletin was published in 1996 and the inserted description is inherent, no new matter has been added.

Claims 1 to 8 and 24 to 35 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Since Figure 1 of the AW-875 provides the required support for independent claims 1, 25, 28 and 33, and new claims 40 to 43, this rejection has been overcome.

Claims 28 to 31, 33 and 34 were rejected as being obvious in view of Ruske U.S. Patent No. 3,909,471 (Ruske). As stated by the Examiner, Ruske teaches colored surface coatings and plastics that contain anthraquinoneoxadiazole pigment. She acknowledges that Ruske differs basically from the claimed invention as per the non-specific disclosure of a composition, as claimed.

The Examiner takes the position that “based on their identified scope equivalency, one having ordinary skill in the art work have found it obvious to extrapolate the composition” as claimed. She opines that the claimed invention is within the purview of the general disclosure of Ruske and with a reasonable expectation of success. The Examiner cites In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) for the proposition that

“It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose....[T]he idea of combining them flows logically from their having been individually taught in the prior art.”

Attorney for Applicants respectfully disagrees that the “identified scope of equivalency” would have led one of ordinary skill to combine a dispersion of polyurethane resin particles, epoxy resin particles and polyvinyl chloride resin particles. The scope of equivalency identified by Ruske is that solid thermoplastic materials, such as polyvinyl chloride, vinyl chloride/vinyl acetate copolymers, polyamides and polycarbonates, and surface coatings that contain other plastics, such as urea or melamine resins, and polyaddition resins, such as epoxy or polyurethane resins, in an organic solvent or in the form of an aqueous organic emulsion, all can be colored with anthraquinoneoxadiazole. See column 1, lines 19 to 35, of Ruske, for example.

At column 1, lines 3 and 4, Ruske teaches that the “invention relates to colored surface coatings and plastics which contain an anthraquinoneoxadiazole. The purpose of the colored coatings and plastics is not taught by Ruske. Therefore there is no teaching in Ruske that the scope of equivalency is the same. If the Examiner disagrees, she is

respectfully requested to point out such teaching. Since the purpose of the colored thermoplastic polyvinyl chloride and the colored epoxy resin or polyurethane resin is not taught to be the same, there is no suggestion to combine the three compositions. In fact, the thermoplastic polyvinyl chloride resin cannot be dissolved in an aqueous dispersion.

The Examiner cites to the Abstract; column 1, lines 3 to 35, the Runs, especially Runs 5, 6 and 8; and the claims, especially claims 1, 2 and 6, as teaching the claimed combination. She specifically argues that claim 1, which recites the coating or plastic material is a polymer selected from the group consisting of polymers that form Applicants' combination, teaches the combination. However, specifically, note the Markush group of claim 1 fails to include "and mixtures thereof." Further the lists set forth in claims 2 and 6 fail to include the phrase "or mixtures thereof," while claim 3 demonstrates that Ruske knew that the phrase "or mixtures thereof" could be used when the list includes all thermoplastic polymers that can be combined.

Unless the Examiner can point to specific language in Ruske that teaches the claimed combination, it is respectfully maintained that claims 28 to 31, 33 and 34 are allowable over Ruske. If the Examiner maintains her rejection over Ruske, she is respectfully requested to quote the specific language that teaches or suggests the claimed combination.

Claims 1 to 8, and 24 to 35 were rejected as being obvious over Kotera et al. U.S. Patent No. 4,340,519 (Kotera). Independent claims 1, 25, 28 and 33 have been amended to narrow the scope of the claims to require the waterborne coating composition, which is a dispersion, to consist essentially of polyurethane resin particles, epoxy resin particles,

specified polyvinyl chloride resin particles, and a component selected from the group consisting of curing agents, aminoplasts, flattening agents, polymeric particles, colored particles, hard particles, surfactants, rheology modifiers, defoamers, coalescing aids and combinations thereof.

The invention of Kotera is an aqueous dispersion of polyester resin. See the Abstract, for example. Independent claims 1, 25, 28 and 33, as presently amended, do not permit the presence of a polyester resin. Therefore, independent claims 1, 25, 28 and 33, and the claims dependent thereon are allowable over Kotera.

Claims 28, 29 and 33 have been rejected as being anticipated by or obvious over Bontinck et al. U.S. Patent No. 5,541,251 (Bontinck). The invention of Bontinck requires at least one vinyl polymer having chain-pendent acetoacetoxyalkyl ester groups. See the Abstract, for example. The present claims 28, 29 and 33, as amended, do not permit the presence of a vinyl polymer having chain-pendent acetoacetoxyalkyl ester group. Therefore, claims 28, 29 and 33 are allowable over Bontinck.

New claims 36 to 42 require the waterborne coating composition to comprise two curing agents that promote curing at two different temperatures, as well as a dispersion of polyurethane resin particles, epoxy resin particles and polyvinyl chloride resin particles. None of Ruske, Kotera and Bontinck teach or suggest two curing agents promoting cure of polyurethane, epoxy and polyvinyl chloride resin particles at two different temperatures. Therefore, claims 36 to 42 are patentable over Ruske, Kotera and Bontinck.

Applicants submit that the claims are in a condition for allowance. Therefore,
early consideration and allowance are respectfully requested.

Respectfully submitted,

11/04/04
Date

Douglas E. Winters
Douglas E. Winters
Reg. No. 29,990
Attorney for Applicants

Armstrong World Industries, Inc.
P.O. Box 3001
Lancaster, PA 17604
(717) 396-4070 (Telephone)
(717) 396-6121 (Facsimile)

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22231-1450 on 11/4/04

April W. Fiedler